

### **Cambridge International Examinations**

Cambridge International Advanced Subsidiary and Advanced Level

#### INFORMATION TECHNOLOGY

9626/02

Paper 2 Practical

October/November 2017

2 hours 30 minutes

Additional Materials:

Candidate Source Files

#### **READ THESE INSTRUCTIONS FIRST**

DO **NOT** WRITE IN ANY BARCODES.

Carry out every instruction in each task.

Save your work using the file name given in the task as and when instructed.

The number of marks is given in brackets [ ] at the end of each task or part task.

Any businesses described in this paper are entirely fictitious.



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International Examinations

You are working for Tawara Technology Solutions (TTS).

You are required to carry out some data handling and media tasks.

You must use the most efficient method to solve each task.

You are required to complete the Evidence Document called Evidence.rtf

All files saved must include your Centre number and candidate number; e.g. Evidence XX999 1234

1 A manufacturing company needs a single central database and has gathered the details of staff employed at each site.

Unfortunately, the sites saved the details in different ways.

You have been provided with these files:

Ashford\_Site\_Job\_Codes.csv
Bolton\_Site\_Job\_Codes.csv
Cardiff\_Site\_Staff.csv
Dundee\_Site\_Job\_Codes.rtf
All\_Employees\_Personal\_Info.csv
Site\_Info.csv
Job\_Codes\_Descriptions.rtf

You are required to develop a database consisting of three related tables containing the:

- data for the employees
- site details
- description of the job codes.

Open the files and analyse the data.

In order to plan the relational database, complete a data dictionary in the Evidence Document provided. Include details of the tables, records, fields, data types and any other relevant information.

There must be no duplication of data.

[19]

2 In a spreadsheet application, prepare the data for importing to a database. Use formulae to add the jobs information to the employees' information.

Save your spreadsheet as All\_Employee\_Data

[12]

3 Create a database named **Combined Factory Data** and import the data.

[12]

4 The company needs information about the number of staff working at each site.

Create a report to display the number of staff employed in each job at each site.

The header and footer must have:

- a black background 2 cm in height
- text displayed in a white sans serif font.

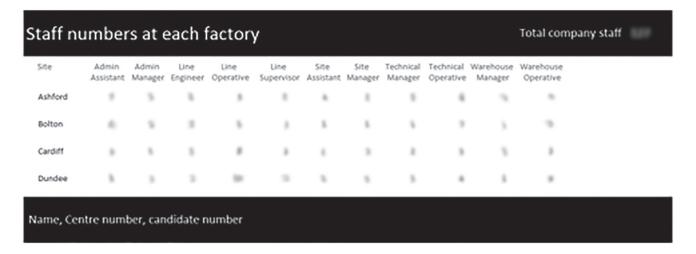
The report must have the title: **Staff numbers at each factory**Set the font size for this title to 24pt and all other text in the header and footer to 16pt.

The columns must be labelled with the job description for each job.

The total number of staff must be shown in the report header with the label **Total company staff** Insert your name, Centre number and candidate number in the footer.

Ensure the formatting of the report is of a professional quality.

The layout of the report should look like this.



Export this report as a pdf file named Staff\_Report

[20]

**5** You have a commission from Froztbite Tours, who run climbing trips to a glacier. They want a video clip to use on their website.

They have provided the following files:

Take\_Off.mp4 Landing.mp4 Glacier.png Helicopter.png

The completed video must be in widescreen (16:9) format and all text in the titles, captions and credits should be in a 48pt serif font.

The *Take\_Off* clip has some blank frames; you will have to trim about 1.5 seconds of footage from the start of the clip.

The *Landing* clip is too long but Froztbite Tours do not want it trimmed. Adjust the speed so that this clip is about 9 seconds long.

Combine these two clips in the correct order.

Reduce the sound of the *Take\_Off* and *Landing* clips so that the helicopter noise can just be heard.

Froztbite Tours require title frames and caption text at the start of the video and caption text at the end

Use **Glacier.png** as the background image for the title frames. It must be displayed for 4 seconds. The title text **Fly to the ICE** must appear after 1 second and scroll upwards for 2 seconds. The caption text **with Froztbite Tours** should then be displayed for 4 seconds.

Insert the **Helicopter.png** image at the end of the video. It must display for 4 seconds. The caption text **See the power of nature close up** must be displayed for 2 seconds and the caption text **See froztbitetours.com for more information** for the remaining time.

Add a transition between the clips.

Save the video as **FroztbiteVideo.mp4** with the same resolution as the original files. [36]

6 Froztbite Tours want voice-over clips added to the video.

They have provided you with four clips.

SoundClip1.mp3

SoundClip2.mp3

SoundClip3.mp3

SoundClip4.mp3

You must edit the clips to remove the starting beep and any sounds or quiet periods that are not needed.

Resave the clips as VoiceOver1 to VoiceOver4

Add the voice-over clips to the video in that order.

VoiceOver1 must play at the start of the video and VoiceOver4 must play during the See froztbitetours.com for more information caption. [4]

7 The original recordings of the voice-over clips were saved as AIFF files but they were provided as MP3 files.

In your Evidence Document answer the following questions:

The AIFF audio files were converted to MP3 files. Give two reasons for this conversion.

You have been asked to resave the audio files to WAV format. Give two reasons for advising against this.

Complete the table to show the file size and bit rate of **SoundClip1.mp3** and explain why some people would say the bit rate used is unnecessarily high. [7]

Save your Evidence Document.

6

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